2.3.2.3 <u>FLU 419 Small Emplacement Excavator (SEE)</u>. (See Figure 2-8.) See Figure 1-2 for Independent Target System (ITS) component.

2.3.2.3.1 Detector Array.

WARNING

Never touch the vehicle exhaust equipment when installing or removing MILES 2000 equipment. The exhaust can be very hot and cause severe burns.

CAUTION

Do not let MILES 2000 cables touch the vehicle exhaust or heating equipment. Heat can cause damage to cables and/or malfunction of the equipment.

ITS vehicle configurations are varied, so there is no specific way to install the Detector Array on a vehicle. When installing the Detector Array, follow the guidelines below:

- a. Remove Detector Array from the transit case, and inspect cable segments and detectors for damage that would prevent normal operation.
- b. Wipe all detectors clean and inspect connector for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. When routing array segments, whenever possible, there should be detectors installed on the right and left sides, as well as on the front and rear. However, this is an ideal layout that should only be used if placement can be accomplished without interfering with normal vehicle operations or presenting a safety hazard. In some cases, the cabling may not be long enough to put detectors on all four sides.
- e. Secure all array segments with fastener tape or fastener tape tie-wraps at frequent intervals. Extra cable between detectors should be rolled and secured to the vehicle.

2.3.2.3.2 Kill Status Indicator (KSI). See Figure 1-2 for KSI mounting adapters/plates.

- a. Remove the KSI and adapter from the transit case, and inspect the KSI for damage.
- b. Inspect strobe assembly of the KSI for cracks. Inspect connector for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. Apply primer and fastener tape to the bottom of the adapter, and to the bottom of the KSI, if needed. (Refer to paragraph 2.3.1.1 for fastener tape application.)

AMPLIFIER (not shown)

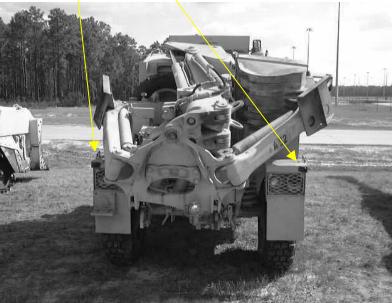
KSI











CONTROL UNIT

POWER CONTROLLER UNIT (Attached to cab wall, to the right and behind the seat)

Figure 2-8. FLU 419 Small Emplacement Excavator MILES Installation.

e. Apply primer and fastener tape to the cab top shield of the vehicle (See Figure 2-8).

NOTE

For the following step, make sure that the KSI and the mast assembly are lined up as described before placing them together, as the fastener tape will make it difficult to separate the units to realign them.

f. Attach the adapter to the cab top shield on the vehicle, and ensure the KSI and adapter are securely mounted.

2.3.2.3.3 Control Unit (CU).

- a. Remove the CU from the transit case and inspect for damage.
- b. Inspect connector for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. Apply primer and fastener tape to the bottom of the CU, if needed. (Refer to paragraph 2.3.1.1 for fastener tape application.)
- e. Apply primer and fastener tape to the vehicle wall as illustrated in Figure 2-8.
- f. Mount the CU to the vehicle wall and ensure it is firmly seated.

2.3.2.3.4 Power Controller.

- a. Remove the Power Controller from the transit case and inspect for damage.
- b. Inspect connector for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. Apply primer and two (2) strips of fastener tape to the bottom of the Power Controller, if needed. (Refer to paragraph 2.3.1.1 for fastener tape application.)
- e. Apply primer and fastener tape to vehicle cab wall behind the commander's seat where the Power Controller will not be in the way (See Figure 2-8).
- f. Mount the Power Controller to the cab wall and ensure it is firmly seated.

2.3.2.3.5 **System Cable.**

NOTE

Route the cables and connect them to the individual units. Secure the cables safely out of the way using fastener tape tie-wraps at intervals.

Letter/number designators are shown in parenthesis. For example: (P3) or (J1). The designators have been added to clarify connector identifications. Each system cable segment is labeled with its unique designator.

Cable segments are labeled with "P" (plug) and "J" (jack) designators as shown in the following example: "P1/J2," where P1 indicates that the connector of that cable segment is plug #1, and J2 indicates the routing destination, jack #2, of the equipment/cable to which the cable segment is being routed. The installation instructions of this manual identify the equipment/cable to which each cable segment is to be routed.

Inside/outside cable access is through the rear of the cab.

- a. Remove the system cable from the transit case. Inspect the entire length of the cable, making sure there are no bare wires exposed, and the cable has not been damaged in any way.
- b. Inspect connectors for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. Route segment (P5) to the vehicle power slave receptacle.
- e. Route segment (P1-violet sleeve) through lower part of driver's door to the Power Controller, and connect (P1) to (J1) of the Power Controller
- f. Route segment (P2-red sleeve) to the CU, and connect (P2) to (J1) of the CU.
- g. Route segment (P3-green sleeve) through the upper part of the commander's door to the KSI, and connect (P3) to (J1) of the KSI.
- h. Route segment (P4-gray sleeve) to the Detector Array, and connect (P4) to (J1) of the Detector Array.
- i. Secure all cables out of the way with fastener tape or fastener tape tie-wraps.
- j. Connect (P5) to the slave receptacle connector.

2.3.2.4 M60A1 AVLB. (See Figure 2-9) See Figure 1-2 for Independent Target System (ITS) components.

2.3.2.4.1 Detector Array.

WARNING

Never touch the vehicle exhaust equipment when installing or removing MILES 2000 equipment. The exhaust can be very hot and cause severe burns.

CAUTION

Do not let MILES 2000 cables touch the vehicle exhaust or heating equipment. Heat can cause damage to cables and/or malfunction of the equipment.

ITS vehicle configurations are varied, so there is no specific way to install the Detector Array on a vehicle. When installing the Detector Array, follow the guidelines below:

- a. Remove Detector Array from the transit case, and inspect cable segments and detectors for damage.
- b. Wipe all detectors clean and inspect connector for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. When routing array segments, whenever possible, there should be detectors installed on the right and left sides, as well as on the front and rear. However, this is an ideal layout that should only be used if placement can be accomplished without interfering with normal vehicle operations or presenting a safety hazard. In some cases, the cabling may not be long enough to put detectors on all four sides.
- e. Secure all array segments with fastener tape or fastener tape tie-wraps at frequent intervals. Extra cable between detectors should be rolled and secured to the vehicle.
- **2.3.2.4.2** Kill Status Indicator (KSI). See Figure 1-2 for KSI mounting adapters/plates.
 - a. Remove the KSI and adapter from the transit case, and inspect the KSI for damage.
 - b. Inspect strobe assembly of the KSI for cracks. Inspect connector for dirt and/or damage.
 - c. Replace and report damaged equipment, as required.
 - d. Apply primer and fastener tape to the bottom of the adapter, and to the bottom of the KSI, if needed. (Refer to paragraph 2.3.1.1 for fastener tape application.)

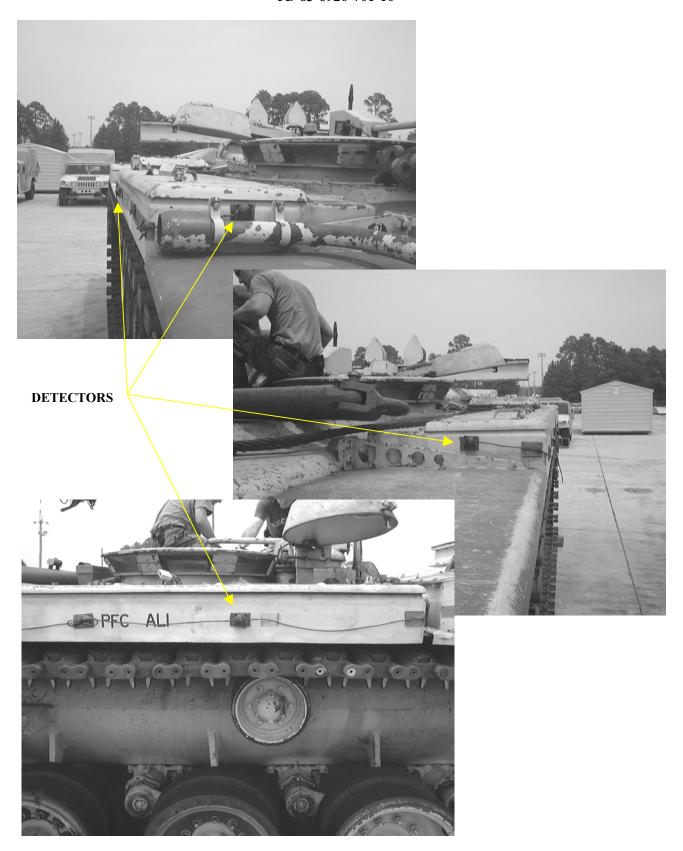


Figure 2-9. M60A1 AVLB MILES Installation (Sheet 1 of 2)

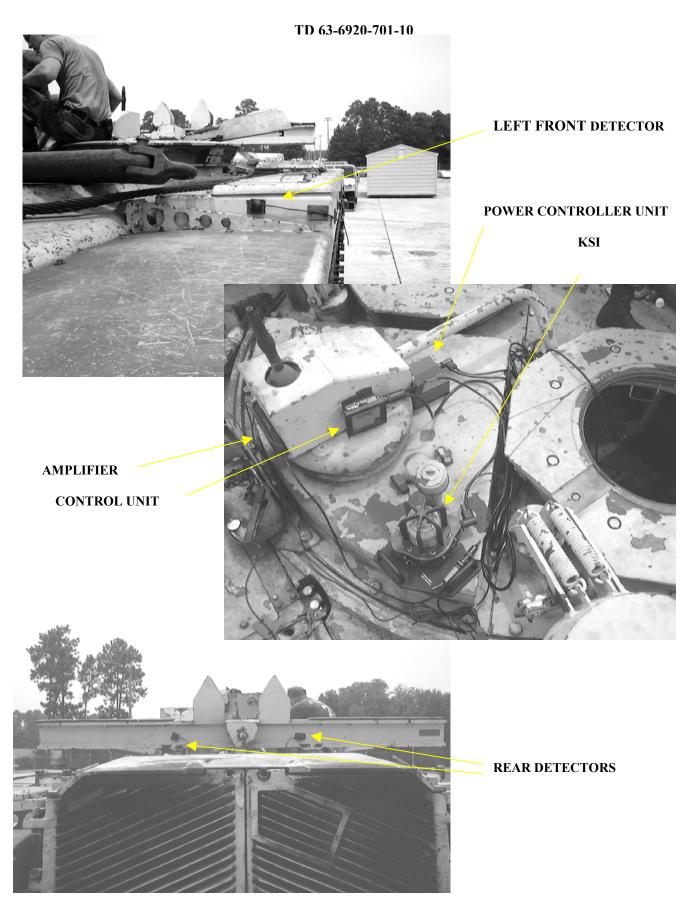


Figure 2-9. M60A1 AVLB MILES Installation (Sheet 2 of 2)

e. Apply primer and fastener tape to the vehicle as shown in Figure 2-9 (Sheet 2 of 2).

NOTE

For the following step, make sure that the KSI and the mast assembly are lined up as described before placing them together, as the fastener tape will make it difficult to separate the units to realign them.

f. Attach the adapter as shown and ensure the KSI and adapter are securely mounted.

2.3.2.4.3 <u>Control Unit (CU)</u>.

- a. Remove the CU from the transit case and inspect for damage.
- b. Inspect connector for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. Apply primer and fastener tape to the bottom of the CU, if needed. (Refer to paragraph 2.3.1.1 for fastener tape application.)
- e. Apply primer and fastener tape as shown in Figure 2-9 (Sheet 2 of 2).
- f. Mount the CU as illustrated and ensure it is firmly seated.

2.3.2.4.4 Power Controller.

- a. Remove the Power Controller from the transit case and inspect for damage.
- b. Inspect connector for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. Apply primer and two (2) strips of fastener tape to the bottom of the Power Controller, if needed. (Refer to paragraph 2.3.1.1 for fastener tape application.)
- e. Apply primer and fastener tape as shown in Figure 2-9 (Sheet 2 of 2).
- f. Mount the Power Controller as shown and ensure it is firmly seated.

2.3.2.4.5 System Cable.

NOTE

Route the cables and connect them to the individual units. Secure the cables safely out of the way using fastener tape tie-wraps at intervals.

Letter/number designators are shown in parenthesis. For example: (P3) or (J1). The designators have been added to clarify connector identifications. Each System Cable segment is labeled with its unique designator.

Cable segments are labeled with "P" (plug) and "J" (jack) designators as shown in the following example: "P1/J2," where P1 indicates that the connector of that cable segment is plug #1, and J2 indicates the routing destination, jack #2, of the equipment/cable to which the cable segment is being routed. The installation instructions of this manual identify the equipment/cable to which each cable segment is to be routed.

- a. Remove the system cable from the transit case. Inspect the entire length of the cable, making sure there are no bare wires exposed, and the cable has not been damaged in any way.
- b. Inspect connectors for dirt and/or damage.
- c. Replace and report damaged equipment, as required.
- d. Route segment (P3-green sleeve) to the KSI, and connect (P3) to (J1) of the KSI.
- e. Route segment (P4-gray sleeve) to the Detector Array, and connect (P4) to (J1) of the Detector Array.
- f. Route segment (P2-red sleeve) to the CU, and connect (P2) to (J1) of the CU.
- g. Route segment (P1-violet sleeve) to the Power Controller, and connect (P1) to (J1) of the Power Controller.
- h. Segment (P5) will not be connected in this configuration. Ensure the connector cover is secured over the connector, and secure the cable out of the way.

NOTE

When vehicle is not in operation, recharge PCU by routing the cable through the hatch to the slave receptacle. Connect P5 to slave receptacle. Crank up vehicle and let it run for at least 20 minutes.

i. Secure all cables out of the way with fastener tape or fastener tape tie-wraps.